AMENDMENTS TO THE SPECIFICATION

Page 1, after the Title, insert the heading:

Field of the Invention

Page 1, after Line 3, insert the heading

Background of the Invention

Page 2, lines 1-13

From ~~patent application~~ US patent 4703846 a trough belt conveyor is known, in which side rolls positioned at an angle ~~relatively~~ relative to the horizontal direction are formed so as to cause vibrations of the transported material through the transporting belt, additionally to decreasing friction against the side walls of the conveyor as a result of rolling friction, such that particles of the material agglomerate in a created trough making impossible or minimizing relative mechanical interaction between immobile parties. This conveyor does not meet a function of compacting either.

From ~~patent application~~ US patent 4911827 a flat belt conveyor for cleaning grain/seed is known with a vibratory portion.

Brief Description of the Invention

Page 2, line 23 to Page 3, line 23

The belt conveyor according to the invention illustratively for transporting loose tobacco material, ~~comprising~~ has a transporting belt equipped with a vibratory sub-assembly with a separate driving device~~,~~ and a feeding channel ~~being~~ placed over the belt, ~~is characterized in that~~ with the vibratory sub-assembly of the transporting belt ~~has~~ having a form of at least two separate vibratory portions, each of them ~~comprising~~ having at least one roller provided with eccentric elements and symmetrically arranged counterweights, and in case of using eccentric elements of the same active radii on the rollers of all the vibratory portions, the distance between the transporting belt and axes of the rollers of the

starting vibratory portion in which feeding of the comminuted tobacco material takes place, is minimal, the distance from the transporting belt to axes of the rollers of successive vibratory portions is an increasing function, and when axes of the rollers of all the vibratory portions are at the same distance from the transporting belt then the active radius of the eccentric elements of the starting vibratory portion is ~~a biggest one~~ the largest and the radius decreases for the eccentric elements of the rollers of successive vibratory portions, and ech of the vibratory portions has separate adjusting elements providing independent adjustment of magnitude and direction of the vibration amplitude vector, and has also separate adjusting elements providing independent adjustment of frequency of the transporting belt vibrations, irrespective of speed of the transporting belt.

Page 4, Lines 8-18

Preferably, an additional belt conveyor ~~comprising~~ having vibratory portions is mounted over the transporting belt.

Preferably, a pressure plate ~~comprising~~ having vibratory portions is swingingly mounted over the transporting belt.

Preferably, a stationary or rotary scraper bucket is mounted over the transporting belt, ~~comprising~~ and includes adjusting elements for adjusting the height of the scraper bucket relative to the transporting belt surface and adjusting the scraping bucket position relative to the transporting belt surface along the horizontal axis extending along the direction of the transporting belt movement.

Brief Description of the Drawings

Page 5, Line 8 to Page 6, Line 17

Fig. 7 shows an example of a swingingly mounted pressure plate.

Detailed Description of the Invention

A belt conveyor according to the invention illustratively shown in fig. 1 compacting comminuted/loose tobacco material ~~comprises~~ has a tension roller 2 placed in a

tensioning portion T1, and a driving roller 1 placed in a driving portion D1 with a mounted thereto external drive (not shown), a load-bearing structure in form of a vibratory sub-assembly, and a transporting belt 3, transporting a material fed in portion A. The surface of the transporting belt may be smooth or may be profiled, depending on technological requirements.

The vibratory sub-assembly has the form of three separate vibratory portions V1, V2,, V3, each of them ~~comprising~~ having three rollers 10A equipped with eccentric elements 10B and symmetrically arranged counterweights 10C~~, and in~~ . In the case of using identical eccentric elements 10B on rollers 10A of all vibratory portions V1, V2, V3, the distance between the transporting belt 3 and the axis of the rollers 10A of the first vibration portion V1, corresponding to a starting portion, in which feeding of the loose tobacco material takes place, is minimal~~, the~~ . The distances from the transporting belt 3 to the axes of rollers 10A of the successive vibratory portions V2, V3 are increasing functions, and when axes of rollers 10A of all vibratory portions V1, V2, V3 are at the same distance from the transporting belt 3 then the active radius of eccentric elements 10B of the first vibratory portion V1 is biggest and the radius decreases for eccentric elements 10B of rollers 10A of successive vibratory portions V2, V3.

Each of the vibratory portions V1, V2, V3 has separate adjusting elements ~~(not shown)~~ formed by rollers 10A and providing independent adjustment of intensity and direction of a vector of the vibration amplitude, and has also separate adjusting elements formed by eccentric elements 10B and providing independent adjustment of frequency of the transporting belt 3 oscillations, irrespective of the belt transporting rate.

Page 7, Lines 4-9

The distances between the driving rollers 10A of a vibratory portion can be independently adjusted so that amplitude of pre-selected, desired value is applied where necessary to maximize impact force transmitted from each roller's eccentrics 10B through the transporting belt 3 to the stream of tobacco 6. Independently of that, revolutions of the rollers 10A within each of the vibratory portions V1, V2, V3 are adjusted by setting

revolutions of the driving motor and/or transmission ratio to each vibratory portion. In this way, the frequency of the roller's rotation is adjusted. By having the mutually independent means of setting positions where both amplitude and frequency are transmitted from the rollers through the transmission belt 3 to the conveyed product, e.g., loose tobacco, specifically advantageous acceleration can be applied to the stream of the conveyed product to orient loose particles of the conveyed product and thus compact the product efficiently and uniformly.

An additional belt conveyor 12 is fastened to the side walls 5 over the transporting belt 3, the belt conveyor 12 comprising vibratory portions as shown in fig. 5 or a pressure plate ~~not shown)~~ 14 (Fig. 7) comprising vibratory portions is mounted swingingly on pins protruding from the side walls 5 over the transporting belt 3.

Page 8, Lines 18-25

The upper profile of the transporting belt 3 may be chosen and adjusted according to the technological process requirements by suitable regulation and/or applying some elements generating vibrations of required profile. For zero amplitude of the vibrations the upper surface of the transporting belt 3 may be inclined at a slight angle ~~relatively~~ relative to the horizontal direction, however it may be positioned horizontally, as in the presented solution.

Page 13, Lines 3-17

Furthermore, it is possible to attach above the material being transferred on the belt 3 an additional belt conveyor 12 with vibratory portions, mounted within the side walls 5, as shown in fig. 5. The purpose of this additional upper belt conveyor 12 is to intensify and/or facilitate compaction of the transported material. The purpose may be also to intensify and/or facilitate a uniform or any desired distribution of the transported material across the transporting belt 3. The upper belt conveyor 12 may be replaced by a pressure plate 14 having vibratory portions ~~and mounted~~ with arms 14a swingingly mounted (fig. 7) on pins protruding from the side walls 5 and means of applying additional

pressure 14B. The purpose of the plate 14 is vibratory pressing down the transported material thereby compacting or facilitating compaction and/or distributing the material transported on the transporting belt 3.

Fig. 7 shows an example of a swingingly mounted pressure plate 14 where the plate is hung above the tobacco stream and its suspension point 14A is positioned and fixed to the conveyor's side walls above the transporting belt 3. Compressing action of the pressure plate can be controlled by adjusting an independently controlled force that can be applied dynamically by e.g. a pneumatic servo-motor 14B and/or adjusting dead-weight of the plate 14.

Page 13, Line 18 to Page 14, Line 5

Furthermore, it has turned out to be advantageous to provide the belt conveyor according to the invention with a stationary or rotary scraper bucket 13, as shown in fig. 6, placed in the ending portion of the transporting belt 3. The scraper bucket 13 may be installed on the side walls 5, irrespective of the additional belt conveyor 12 or the pressure plate 14. The scraper bucket 13 is equipped with adjusting elements ~~(not shown)~~ 13A (Fig. 6) for adjusting its height ~~relatively~~ relative to the belt surface and for adjusting its position along the horizontal axis X. Employing the scraper 13 makes it possible to obtain a constant level of the transported material at the output of the conveyor, irrespective of - fluctuations of feeding the material onto the conveyor.